

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Darren Eby

For : **BRACKET FOR FOLDAWAY ASSIST HANDLE**

Mail Stop Patent Application  
Commissioner for Patents  
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REQUEST BY APPLICANT FOR INTERFERENCE WITH PENDING PATENT  
APPLICATION UNDER 37 C.F.R. § 1.604

BACKGROUND

Applicant seeks to have an interference declared between the present application and pending United States Patent Application, Serial No. 10/283,533, filed October 30, 2002 by Marshall et al. for HANDRAIL AND BRACKET ASSEMBLY, and published February 13, 2003 as Publication No. US 2003/0029974 A1 (hereinafter "the Marshall et al. '533 application"). A copy of United States Patent Publication No. US 2003/0029974 A1 is enclosed herewith. There exists no common ownership between the Marshall et al. '533 application and the present application.

Applicant's present application claims priority of U.S. provisional application, Serial No. 60/404,093, filed on August 16, 2002, and is substantially identical to Applicant's '093 provisional application. The Marshall et al. '533 application claims priority of U.S. provisional application, Serial No. 60/390,143, filed on June 20, 2002 (hereinafter "the Marshall et al. '143 provisional application"). Applicant's effective filing date is prior to the filing date of the Marshall et al. '533 application and, to the extent that the applicants of the Marshall et al. '533 application can rely on the Marshall et al. '143 provisional application, Applicant's effective filing date is within three months of the filing date of the Marshall et al. provisional application. Although Applicant filed Applicant's '093 provisional application after the filing date of the Marshall et al. '143 provisional application, Applicant invented the claimed invention well prior to the filing date of the Marshall et al. '143

Applicant : Darren Eby  
For : BRACKET FOR FOLDAWAY ASSIST HANDLE  
Page : 2 of 5

provisional application. Therefore, Applicant submits that an interference should be declared.

Claims 15, 16 and 17 of the present application correspond to claims 1, 52 and 60, respectively, of United States Patent Publication No. US 2003/0029974. Applicant has copied these claims from United States Patent Publication No. US 2003/0029974 for the purpose of having an interference declared.

#### PROPOSED COUNT

A proposed count is as follows:

A method for installing a hand rail to a surface of a vehicle,  
said method comprising:

assembling a hand rail to at least one bracket, said hand rail  
being positionable in a first position relative to said at least one bracket  
and a second position relative to said at least one bracket; and

mounting said at least one bracket to the surface after said hand  
rail is attached to said at least one bracket.

#### IDENTIFICATION OF AT LEAST ONE CLAIM IN THE MARSHALL ET AL. '533 APPLICATION THAT CORRESPONDS TO THE PROPOSED COUNT

At least claim 52 of the published Marshall et al. '533 application is believed to correspond to the proposed count. In order to assist the Examiner, the following sets forth a comparison of claim 52 of the published Marshall et al. '533 application to the proposed count. Claim 52 of the published Marshall et al. '533 application includes a rail and a bracket, with the rail being retained in a first or second position. The mounting hole of the bracket is nearer a first wall of the bracket than the second wall, while a first channel of the bracket is nearer the second wall of the bracket than the first wall. The position of the

Applicant : Darren Eby  
For : BRACKET FOR FOLDAWAY ASSIST HANDLE  
Page : 3 of 5

mounting hole and the first channel relative to the walls of the bracket allows the bracket to be mounted to the surface after the rail is attached to the bracket.

APPLICANT'S CLAIMS AND SUPPORT FOR APPLICANT'S  
CLAIMS IN APPLICANT'S SPECIFICATION

Claim 1 in the present application corresponds to the proposed count. Claim 1 includes a bracket for receiving a handle and retaining the handle in a first, in use position or a second, stored position. The mounting apertures of the bracket are accessible for securing the bracket to a surface of the vehicle when the handle and pivot pin are assembled to the bracket.

Claim 5 in the present application corresponds to the proposed count. The method of claim 5 includes assembling a hand rail to at least one bracket, such that the hand rail is positionable in first and second positions relative to the at least one bracket. The method of claim 5 also includes mounting the at least one bracket to the surface after the hand rail is attached to the at least one bracket.

Claim 11 in the present application corresponds to the proposed count. Claim 11 includes a hand rail that is received in a pair of brackets and is pivotable between first and second positions relative to the brackets. At least one of the brackets includes a mounting aperture that is offset from a pivot pin and is accessible to mount the bracket to the surface of the vehicle when the hand rail and pivot pin are assembled to the bracket.

Claim 15 in the present application corresponds to the proposed count and is a copy of claim 1 of the published Marshall et al. '533 application. Claim 15 in the present application is supported in the specification of the present application at least as follows: Applicant's specification discloses a handrail and bracket assembly having a rail (16) and a bracket (14). The bracket includes a base or plate (24), first and second walls (14a, 14b) extending from the base, at least one mounting hole (28) in the base, and a channel (22) for

Applicant : Darren Eby  
For : BRACKET FOR FOLDAWAY ASSIST HANDLE  
Page : 4 of 5

receiving the rail. The axis of the channel is located nearer one of the walls (14b) than the other wall (14a) (see, for example, FIG. 4).

Claim 16 in the present application corresponds to the proposed count and is a copy of claim 52 of the published Marshall et al. '533 application. Claim 16 in the present application is supported in the specification of the present application at least as follows: Applicant's specification discloses a handrail and bracket assembly having a rail (16) and a bracket (14). The bracket includes a base (24) and first and second walls (14a, 14b) extending from the base. The base includes at least one mounting hole (28) located in the base between the first and second walls, and nearer the first wall (14a) than the second wall (14b) (see, for example, FIG. 4). The bracket includes a first channel (22a) for retaining the rail in a first position (see, for example, FIG. 1) and a second channel (22b) for retaining the rail in a second position (see, for example, FIG. 2) that is perpendicular to the first position. The longitudinal axis of the first channel (22a) is located between the walls and nearer the second wall (14b) than the first wall (14a) (see, for example, FIG. 4).

Claim 17 in the present application corresponds to the proposed count and is a copy of claim 60 of the published Marshall et al. '533 application. Claim 17 in the present application is supported in the specification of the present application at least as follows: Applicant's specification discloses a handrail and bracket assembly having a rail (16) and a bracket (14). The bracket includes a base (24) and a first wall (14b) and a second wall (14a) extending from the base and perpendicular thereto. The bracket includes first means (22a) for retaining the rail in the first position between the first and second walls such that the rail extends parallel to the walls (see, for example, FIG. 1) and is located nearer the first wall (14b) than the second wall (14a). The bracket includes second means (22b) for retaining the rail in a second position such that the rail extends perpendicular to the first and second walls (see, for example, FIG. 2). The bracket includes at least one mounting hole (28) in the base. The mounting hole is located nearer the second wall (14a) than the first wall (14b).

Applicant : Darren Eby  
For : BRACKET FOR FOLDAWAY ASSIST HANDLE  
Page : 5 of 5

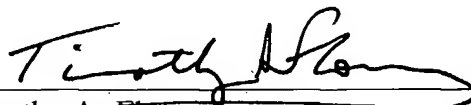
Applicant respectfully requests that an interference be declared employing the proposed count as set forth above with the present application and the U.S. patent application, Serial No. 10/283,533.

Respectfully submitted,

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BRACKET FOR FOLDAWAY ASSIST HANDLE  
CROSS REFERENCE TO RELATED APPLICATION

The present application claims priority of U.S. provisional application, Ser. No. 60/404,093, filed Aug. 16, 2002, which is hereby incorporated herein by reference in its entirety.

FIELD OF THE INVENTION

The present invention relates generally to assist handles or rails for recreational vehicles and the like and, more particularly, to a foldaway assist handle or rail assembly which is mountable to a side of a recreational vehicle.

BACKGROUND OF THE INVENTION

Foldaway assist rails or handles are known and are mountable to a side of a recreational vehicle or the like via securing brackets to the vehicle with suitable fasteners. The handle or railing is foldable between a stored position, where the handle is positioned along a side of the vehicle, and an in use position, where the handle extends outwardly from the vehicle for a person to grasp the handle as they are entering or leaving the recreational vehicle. The handle is pivotally mounted to a pair of brackets via a pivot pin at each end of the handle. The brackets are mounted or installed at the side of the vehicle. However, in order to install the brackets to the vehicle, the handle assembly must be supplied as component parts, particularly, the handle and pivot pins must be separate from the brackets, in order to provide access to the mounting holes in the brackets for screwing, bolting or otherwise fastening or securing the brackets to the wall or side of the recreational vehicle. This is because the mounting holes are generally centered on the bracket and the pivot pin is also generally centered on the bracket, such that the pivot pin is aligned along the mounting holes and thus restricts or precludes access to the fasteners inserted through the mounting holes. The handle must then be assembled to the brackets after the brackets are installed at the vehicle. This not only increases the number of steps to mount the handle, but the person installing the handle assembly must make careful measurements to position the brackets at the appropriate location on the vehicle surface.

SUMMARY OF THE INVENTION

The present invention is intended to provide a folding or fold away assist rail or handle assembly that can be mounted to a vehicle in an assembled state, in order to ease

installation of the brackets and handle assembly onto the targeted recreational vehicle or the like.

According to an aspect of the present invention, a bracket for pivotally mounting a handle or railing adjacent an opening of a vehicle includes a handle receiving portion, a pivot pin and at least one mounting hole or aperture. The handle receiving portion receives an end of the handle therein, while the pivot pin pivotally mounts the end of the handle at the handle receiving portion. The handle receiving portion is configured to retain the end of the handle such that the handle is in an in use position or a folded or storage position. The pivot pin includes a biasing member to bias the handle at either the in use position or the storage position relative to the handle receiving portion. The pivot pin extends downward from the handle receiving portion. The mounting apertures are accessible for securing the bracket to a surface of the vehicle with the pivot pin and handle assembled to the bracket. This may be accomplished by the mounting apertures being offset relative to the pivot pin.

In one form, a handle receiving portion for receiving a handle in its outward or in use position is offset toward one side from a centerline of the bracket, while the at least one mounting aperture is offset toward the other side from the centerline of the bracket, thereby providing clearance and access to the mounting apertures for installation of the bracket to the surface of the vehicle.

According to another aspect of the present invention, a method of attaching or mounting a handle or railing to a surface of a vehicle includes assembling the railing to at least one bracket, such that the railing is pivotally attached to the at least one bracket, and then mounting the at least one bracket to the side of the vehicle. The handle assembly, including the railing or handle and the at least one bracket, is thus mounted to the side of the vehicle as an assembled unit.

Therefore, the present invention provides a handle assembly having a mounting bracket for pivotally mounting a foldaway assist handrail or handle to a vehicle which does not require the assembly to be supplied as separate components and does not require disassembly of the handle assembly prior to installation of the brackets on the vehicle. The handle assembly, which includes the handle, brackets and pivot pins, may be preassembled and installed onto the wall or side of the vehicle as a unit, since the mounting holes are accessible even when the handle and pivot pins are assembled to the brackets.

These and other objects, advantages, features and purposes of this invention will become apparent upon review of the following specification in conjunction with drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a handrail mounted to a bracket on a vehicle in accordance with the present invention, with the handrail in an in use position;

FIG. 2 is a perspective view of the handrail of FIG. 1, with the handrail in a stored position;

FIG. 3 is a perspective view of a bracket of the present invention for use with the handrail of FIGS. 1 and 2; and

FIG. 4 is a side elevation of the bracket of FIG. 3.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings and the illustrative embodiments depicted therein, a foldaway handrail or handle assembly 10 is mountable to a side or surface of a vehicle 12 (FIGS. 1 and 2) adjacent to a door or other opening in the vehicle. The handle assembly 10 includes a pair of brackets 14 and a handrail or handle 16 pivotally mounted at each end to the brackets 14. As can be seen in FIGS. 1 and 2, handle 16 is selectively pivotable between an in use position (FIG. 1), where the handle extends outwardly from the side of the vehicle, and a foldaway or stored position (FIG. 2), where the handle is folded along the side of the vehicle, as is known in the art. The brackets 14 are mountable to the side of the vehicle 12 with the handrail pivotally mounted to the brackets, such that the handrail assembly 10 is mountable to the vehicle as a pre-assembled unit.

Handle 16 is pivotally mounted at each end to a respective bracket 14 via a pivot pin or bolt 18. The pivot pin 18 extends through the end of the handle and is retained at one end by a cap member or top cap 20 on an upper portion of the end of the handle. The top cap 20 may be curved to mate with the generally cylindrical shape of the handle to limit rotation of the top cap relative to the handle. The bracket 14 includes a handle receiving portion 22 at an upper end thereof and a mounting plate 24 along a rear surface or engaging surface of the bracket. The handle receiving portion 22 includes a U-shaped channel or receiving portion 22a, 22b for receiving the end of the handle in each of the two positions, as can be seen in FIG. 3. In the illustrated embodiment of FIG. 3, the U-shaped portion 22a receives the end of the handle 16 when the handle is in the in use position, while the U-shaped portion 22b receives the end of the handle 16 when the handle is in the storage or fold away position.

The pivot pin 18 extends from the top cap 20 through the handle 16 and through the handle receiving portion 22 to pivotally retain the end of the handle to the respective bracket 14. The pivot pin 18 includes a biasing member or spring 26 positioned below the handle receiving portion 22 which functions to bias or pull the pin 18 and handle end downward into



the particular U-shaped portion 22a, 22b of the handle receiving portion 22. Pivotal movement of the handle between the folded or storage position and the in use position is accomplished by lifting upward at the handle to pull the ends of the handle upward out of the U-shaped handle receiving portions of the brackets, and pivoting the handle 16 until the ends of the handle generally align with the other U-shaped handle receiving portions of the brackets. The handle then may be lowered down, such that the ends of the handle are lowered into the other U-shaped handle receiving portions and biased therein by the springs 26 of the respective brackets 14.

As shown in FIG. 4, the pivot pin 18 and biasing member 26 extend downward from the handle receiving portion 22 and generally along the mounting plate 24 of the bracket 14. The mounting plate 24 includes one or more mounting holes or apertures 28 through the mounting plate for receiving suitable fasteners (not shown) therethrough. As can be seen in FIG. 4, the apertures 28 are positioned toward one side 14a of the bracket 14, so as not to align with the pivot pin 18. This provides easy access to the mounting holes to facilitate fastening or mounting the bracket to the vehicle with suitable fasteners without disassembly of the handle assembly or removal of the pivot pin from the bracket. In the illustrated embodiment, the mounting holes 28 are at least partially offset toward the one side 14a of the bracket 14 from a centerline 14c of the bracket 14, while the handle receiving portion 22a for holding the handle in its in use position is at least partially offset from the centerline 14c of the bracket 14 toward the other side 14b of the bracket, in order to provide clearance and access to the mounting holes 28, while minimizing the overall width of the bracket 14.

Therefore, the present invention provides a bracket for a foldaway handle assembly which may be easily mounted to a surface of a vehicle without requiring disassembly of the handle from the bracket prior to the installation. The handle assembly thus may be pre-assembled and installed to the vehicle as a single unit, such that further assembly of the handle to the brackets is not required after the brackets have been installed to the vehicle.

Changes and modifications in the specifically described embodiments can be carried out without departing from the principles of the present invention, which is intended to be limited only by the scope of the appended claims as interpreted according to the principles of patent law.